WHAT IS CLAIMED IS:

1. A microresonator system, comprising:

a light source to produce light;

a first waveguide coupled to receive the light from the light source; and

at least one microresonator disposed to couple light into the microsphere from the first waveguide, the microresonator defining whispering gallery modes and having at least a porous surface region.

2. A system as recited in claim 1, wherein the whispering gallery modes are excitable by the light coupled into the microresonator from the light source via the waveguide and the whispering gallery modes are optically coupled to the porous surface region.

3. A system as recited in claim 1, wherein the microresonator is formed entirely from porous material.

4. A system as recited in claim 1, wherein the microresonator includes a porous outer layer disposed over a core.

5. A system as recited in claim 4, wherein the core is a non-porous core.

6. A system as recited in claim 4, wherein the core comprises a hollow body.

7. A system as recited in claim 1, further comprising a detector optically coupled to receive light from the microresonator.

8. A system as recited in claim 7, wherein the detector is optically coupled to receive light from the microresonator via the first waveguide.

9. A system as recited in claim 7, further comprising a second waveguide coupling light between the microresonator and the detector.

10. A system as recited in claim 1, wherein the porous surface region of the microresonator is modified to attract an analyte.

11. A system as recited in claim 10, wherein the porous surface region of the microresonator is provided with one of an antigen and an associated antibody.

12. A system as recited in claim 1, further comprising an analyte in a liquid medium, the porous surface region being exposed to the liquid medium.

13. A system as recited in claim 1, further comprising an analyte in a gaseous medium, the porous surface region being exposed to the gaseous medium.

14. A system as recited in claim 1, wherein the microresonator comprises a surfactant-templated coating on the porous region.

15. A system as recited in claim 1, wherein the porous surface region has a thickness less than the wavelength of the light provided by the light source.

16. A system as recited in claim 15, wherein the porous surface region has a thickness less than one tenth of the wavelength of the light provided by the light source.

17. A system as recited in claim 1, further comprising an optically active material on the porous surface region.

18. A method of detecting an analyte, comprising:

passing light into a first waveguide;

coupling light from the first waveguide into a microresonator having a porous surface region;

exposing the porous coupling region to a fluid containing the analyte;

monitoring light from the microresonator; and

determining, from the monitored light, presence of the analyte.

19. The method as recited in claim 18, further comprising scanning the wavelength of the light coupled into the microresonator.

20. The method as recited in claim 18, wherein the fluid is a gaseous mixture containing the analyte.

21. The method as recited in claim 18, wherein the fluid is a liquid containing the analyte.

22. The method as recited in claim 18, wherein the analyte is a protein.

23. The method as recited in claim 18, wherein the analyte is a bacterium.

24. The method as recited in claim 18, wherein the analyte is a virus.

25. A microresonator, comprising:

a body operative as a microresonator, defining whispering gallery modes at at least a first wavelength, at least a surface portion of the body being porous.

26. A microresonator as recited in claim 25, wherein the body is substantially spherical.

27. A microresonator as recited in claim 25, wherein the body is substantially planar.

28. A microresonator as recited in claim 25, wherein the body is formed entirely from porous material.

29. A microresonator as recited in claim 25, wherein the body comprises a core and a porous outer layer surrounding at least a portion of the core, the porous outer layer forming the porous surface portion.

30. A microresonator as recited in claim 29, wherein a geometrical center of the core is coincident with a geometrical center of the porous outer layer.

31. A microresonator as recited in claim 29, wherein a geometrical center of the core is not coincident with a geometrical center of the porous outer layer.

32. A microresonator as recited in claim 29, wherein the thickness of the porous outer layer over the core is non-uniform.

33. A microresonator as recited in claim 25, wherein the porous surface portion of the body is formed from a porous silica material.

34. A microresonator as recited in claim 33, wherein the porous silica material is a calcined porous silica material.

35. A microresonator as recited in claim 25, wherein the body has a core comprising silica.

36. A microresonator as recited in claim 25, wherein the porous surface portion of the body has a porosity in the range from 10% to 90%.

37. A microresonator as recited in claim 25, wherein the microresonator comprises a surfactant-templated coating on the porous surface portion.

38. A microresonator as recited in claim 25, further comprising an optically active material on the porous surface portion.